



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,796	03/30/2001	Yves Le Du	ATOCM-209	4998

23599 7590 06/18/2003

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.  
2200 CLARENDON BLVD.  
SUITE 1400  
ARLINGTON, VA 22201

EXAMINER

JACKSON, MONIQUE R

ART UNIT	PAPER NUMBER
----------	--------------

1773

DATE MAILED: 06/18/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/821,796

Applicant(s)

LE DU ET AL.

Examiner

Monique R Jackson

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-19, 27-30, 33, 34 and 36 is/are rejected.
- 7) ☒ Claim(s) 20-26, 31, 32 and 35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 04 April 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

1. The amendment filed 4/4/03 has been entered. New claim 36 has been added. Claims 16-36 are pending in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112***

3. Claims 18, 19 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 18 recites the limitation “wherein said structure comprises polypropylene layers (7,2)...the binder layer being sandwiched between the metal or metallized-substrate layer (5) and the polypropylene layer (7,2), the heating being at a temperature below the melting temperature of the polypropylene layer (7,2)” however it is unclear how the binder layer is sandwiched between the metal or metallized-substrate layer and the two polypropylene layers of the structure given that there is only one binder layer.
4. Claims 19 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 19 and 36 recite “a peel force for peeling the binder layer (6) off the polypropylene layer...of between 8 and 15 N/15mm” however the claims nor the disclosure provide any indication as to the direction or angle at which peeling is performed or the speed at which peeling was conducted. Hence, given that the peel force is affected by the angle and speed at which peeling is conducted, a recitation of a peeling force without indicating the test conditions at which the test was performed is indefinite given that one having ordinary skill

Art Unit: 1773

in the art would not be reasonably apprised of the scope of the claimed invention and could not interpret the metes and bounds of the claim so as to understand how to avoid infringement.

***Claim Rejections - 35 USC § 102***

5. Claims 16, 17 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Claude et al (USPN 4,398,644.) Claude et al teaches a two-layer composite closure heat-sealed to a plastic container such as a container formed of polypropylene (*polypropylene layer*), that may be subjected to sterilization such as in packaging food products, wherein the two-layer composite comprises a metal foil, such as aluminum foil with a thickness between 30 and 80 microns, and an adhesive layer wherein the adhesive layer bonded to one side of the metal foil, said adhesive layer being formed of a mixture of two compounds A and B, compound A being a copolymer of an aliphatic monoolefin and a monoethylenically unsaturated carboxylic acid which has good heat-sealed adhesion to the metal foil and the container, such as polypropylene grafted with less than 5 weight percent of acrylic or methacrylic acid (*binder comprising polypropylene*) and Compound B being a compound adapted to reduce adhesion of Compound A for the container sufficiently that a viable capping seal is formed by heat sealing and yet closure is conveniently peelable from said container (Abstract; Claim 1; Col. 1; Col. 4, lines 24-55.) Claude et al further teach that when the container is polypropylene and compound A is propylene with acrylic acid, Compound B may be copolymers of ethylene and propylene and copolymers of ethylene grafted with acrylic acid such as used as Compound A when the container is polyethylene, wherein the Examiner notes that the resulting adhesive layer would inherently have a melting point lower than the polypropylene layer (Col. 2, lines 1-51.) Claude et al teach that as a general rule the adhesive layer may contain from 10 to 90 weight percent of Compound

Art Unit: 1773

A and from 90 to 10 weight percent of Compound B but that the composition is chosen on the basis of the nature of the two compounds and its intended-use wherein it should contain enough Compound A to be adhesive, and enough of Compound B for the composite material to be capable of being ripped off (Col. 2, lines 51-60.) Claude et al teach that the adhesive layer is formed on the metal foil by coating a liquid solution of the compounds on the metal foil and then heating to a temperature such that the compounds melt (Col. 3, lines 24-57.) The composite material is then joined to the container by heat sealing at a temperature sufficiently high for the composition material to adhere well to the container but should not be too high, so that the composite material would be peelable wherein if the temperature is excessively high, it will no longer be possible to peel off the composite material wherein for a polypropylene container the heat-sealing temperature is between 170 and 250°C (Col. 3, line 60-Col. 4, line 26.) Though Claude et al do not teach that the binder layer is extrusion coated onto the metal as instantly claimed, the Examiner takes the position that the invention taught by Claude et al comprises the same materials as instantly claimed inherently being resistant to food acids and high-performance solvents and greases and appears to be the same final product as instantly claimed, wherein it is noted that product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process." In re Thorpe, 227 USPQ 964,966 (Fed. Cir. 1985.) Therefore, in terms of the extrusion rate and heat

Art Unit: 1773

treatment, the Examiner takes the position that these limitations are process limitations that do not materially affect the resulting product and hence, given that the invention taught by Claude et al appears to be the same product as instantly claimed and Claude et al anticipates the instant invention.

***Claim Rejections - 35 USC § 103***

6. Claim 33 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claude et al. The teachings of Claude et al are discussed above. Though Claude et al do not teach extrusion coating the binder layer as instantly claimed, extrusion coating is a functionally equivalent coating method utilized in the art and it would have been obvious to one having ordinary skill in the art at the time of the invention to extrusion coat the binder layer taught by Claude et al and further to determine the optimum extrusion rate to provide the desired thickness of the binder layer wherein increased extrusion rate results in decreased thickness wherein Claude et al teach that the binder layer preferably has a thickness of less than 20 microns (Col. 3, lines 20-21.) With respect to instant Claim 36, though Claude et al do not specifically teach the peel force as instantly claimed, Claude et al teach that the amount of Compound A and Compound B can be varied such that the desired adhesion/release or suitable peeling properties are obtained (Examples.)

***Allowable Subject Matter***

7. Claims 20-26, 31-32 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or render obvious a

Art Unit: 1773

multilayer structure comprising a metal or metallized substrate layer, a binder layer comprising polypropylene sandwiched between the metal or metallized layer and a polypropylene layer having a melting point higher than the binder layer, wherein the binder layer is non-delaminable from the metal or metallized substrate but peelable from the polypropylene layer wherein the binder layer has the composition as instantly claimed in Claim 20.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Monique R. Jackson  
Patent Examiner  
Technology Center 1700  
June 12, 2003